Images in Rheumatology

An Atypical Heel Pain

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Kaposi sarcoma (KS) is an angioproliferative neoplasm induced by human herpesvirus 8 (HHV8) targeting the cutaneous and lymphatic systems, with possible involvement of other organs such as lower limb bones.1

A 72-year-old male patient of Senegalese origin with a 10-year history of rheumatoid arthritis (RA) taking methotrexate (MTX) consulted regarding a 1-year history of chronic mechanical pain of the left heel. Examination revealed calcaneus pain with a swollen ankle, without fever, weight loss, or skin lesion. The patient underwent a first magnetic resonance imaging (MRI; Figure 1A). The initial diagnosis was a stress fracture. The patient received nonweight-bearing orthopedic treatment. Because of the persistent pain, he underwent a second MRI 4 months later (Figure 1B). Several ill-defined, suspicious lesions involving the calcaneus and the lower end of the tibia were described. The patient underwent computed tomography (CT)-guided bone biopsy. The histological specimen analysis that led to the final diagnosis is presented in Figure 2. Figure 2A shows numerous vascular spaces surrounded by spindle cell proliferations, both with minimal atypia (hematoxylin-eosin-saffron, 130×). Figure 2B shows that the endothelial cells and spindle cells express HHV8 (HHV8 immunostaining, 200×).

The final diagnosis was endemic KS based on current classification criteria, with revealing bone involvement. Indeed, the HIV serology was negative. The patient had no pathology or immunosuppressive treatment other than RA being treated with low-dose MTX, which is considered an immunomodulatory and not immunosuppressive therapy, even if the difference

Figure 1. Left ankle MRI. (A) T2-weighted fat-saturated (left) and T1-weighted (right) MRI, sagittal section. Arrow shows a fracture line in the calcaneus, associated with significant bone edema and atypical T1 hypointensity. (B) T2-weighted fat-saturated (left) and T1-weighted (right) MRI, sagittal section, 4 months later, showing suspicious signal abnormalities. MRI: magnetic resonance imaging.

Figure 2. Histopathology of bone biopsy sample from the calcaneal lesion. (A) Numerous vascular spaces surrounded by spindle cell proliferations, both with minimal atypia (hematoxylin-eosin-saffron, 130×); and (B) HHV8-positive cells (HHV8 immunostaining, x 200). HHV8: human herpesvirus 8.
may be unclear because MTX in RA has been associated with opportunistic infection. The classification of non-HIV–related KS includes endemic, classic, and immunocompromised forms, and it seems especially relevant for treatment management to specify the nonimmunocompromised status of the patient. Global patient assessment included a positron emission tomography/CT scan, which did not reveal any visceral involvement. A role for MTX-induced immunomodulation in the evolution of the disease cannot be excluded. This case must lead clinicians to remain vigilant when examining patients with RA who present with nontraumatic pain and other atypical early signs. In cases such as this, physicians should be alert for atypical fracture locations or MRI abnormalities that are present at the initial patient examination.

REFERENCES